California Regional Water Quality Control Board
San Diego Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb9/
9174 Sky Park Court, Suite 100, San Diego, California 92123-4340
Phone (858) 467-2952 • FAX (858) 571-6972

Gray Davis
Governor

September 5, 2003

Mr. Harold Bailey
Director of Operations and Water Quality
Padre Dam Municipal Water District
10887 Woodside Avenue
Santee, CA 92072-9003

In Reply Refer To:
POTW: 01-0053.02: hansd

Dear Mr. Bailey:

COMMENT RESPONSE DOCUMENT AND ERRATA SHEET FOR TENTATIVE ORDER NO. R9-2003-0179, NPDES PERMIT NO. CA0107492 FOR THE PADRE DAM MUNICIPAL WATER DISTRICT, PADRE DAM WATER RECYCLING FACILITY DISCHARGE TO SYCAMORE CREEK AND THE SAN DIEGO RIVER, SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region has reviewed all written comments received regarding tentative Order No. R9-2003-0179, Draft NPDES Permit No. CA0107492. Enclosed are copies of responses to comments and a proposed Errata Sheet, which was prepared to incorporate minor modifications to the tentative Order.

The Regional Board will consider adoption of the tentative Order, with Errata Sheet, at their September 10, 2003 regularly scheduled meeting.

If you have any questions, please contact Mr. David Hanson at (858) 467-2724, or via email at hansd@rb9.swrcb.ca.gov.

Respectfully,

JOHN H. ROBERTUS
Executive Officer

enclosures
cc: interested party list

DISTRIBUTION LIST

John Richards
Office of Chief Counsel (OCC)
State and Regional Board Services
P.O. Box 100
Sacramento, CA 95812-0100

John Norton
State Water Resources Control Board
Compliance Assurance and Enforcement Unit
P.O. Box 100
Sacramento, CA 95812-0100

Terry Oda
WTR-5
USEPA REGION 9
75 Hawthorne Street
San Francisco, CA 94105

Janis Gomes
WTR-5
USEPA REGION 9
75 Hawthorne Street
San Francisco, CA 94105

Doreen Stadtlander
U.S. Fish and Wildlife Service
2730 Locker Avenue, West
Carlsbad, CA 92008

Gary Erbeck
Department of Environmental Health
County of San Diego
P.O. Box 129261
San Diego, California 92112-9261

Richard Carlson
County of San Diego Department of
Environmental Health
5201 Ruffin Road, Suite C
San Diego, CA 92123

Brian Bernados
California Department of Health Services
1350 Front Street, Room 2050
San Diego, CA 92101

Rob Hutsel
San Diego River Park Foundation
4891 Pacific Highway, Suite 114
San Diego, CA 92110

Deborah Jones
San Diego River Park – Lakeside Conservancy
P.O. Box 262487
San Diego, CA 92126-2487

Ann Hix
City of San Diego Parks and Recreation
1250 6th Avenue, 4th Floor
San Diego, CA 92101

Alan Langworthy
City of San Diego Metropolitan Wastewater
Department
4918 North Harbor Drive, Suite 201
San Diego, CA 92106-2359

Bill Paznokas
California Department of Fish and Game,
South Coast Region
4949 Viewridge Drive
San Diego, CA 92123

Marco A. Gonzalez
Surfrider Foundation, San Diego Chapter
215 South Hwy. 101, Ste. 206
Solana Beach, CA 92075

Jim Peugh
San Diego Audubon Society
2321 Morena Boulevard, Suite D
San Diego CA 92110

Edward Kimura
Sierra Club, San Diego Chapter
6995 Camino Amero
San Diego, California 92111

Bruce Reznik
San Diego BayKeeper
2924 Emerson Street, Suite 220
San Diego, CA 92106

Laura Hunter
Environmental Health Coalition
1717 Kettner Blvd., Suite 100
San Diego, CA 92101

Comments and Responses to Tentative Order No. R9-2003-0179 and Draft NPDES Permit No. CA0107492 for the Padre Dam Municipal Water District, Padre Dam Water Recycling Facility discharge to the Sycamore Creek and the San Diego River, San Diego County

The Regional Water Quality Control Board, San Diego Region (Regional Board) issued Tentative Order No. R9-2003-0179 and Draft NPDES Permit No. CA0107492 on August 11, 2003 for public comment. Written comments were received until close of business, September 3, 2003. This document is staff's response to comments received.

Comment	Staff Response
Comments received from Padre Dam Municipal Water District	
Page 1, Finding 4, Second sentence: The PDWRF has a ~~design~~ rated average capacity of 2.0 mgd.	The suggested change will be made. See Errata Sheet Item 1.
Page 1, Finding 4, Third sentence: Remove: *and portions of the unincorporated communities of Alpine, Blossom Valley, Crest, Dehesa, Flinn Springs, Harbison Canyon*	The suggested change will be made. See Errata Sheet Item 2.
Page 2, Finding 5, Third Sentence: Add Anaerobic stage to the series.	Anaerobic activity occurs within the anoxic stages. No change needed.
Page 2, Finding 6, First Sentence: Should Read: The Effluent from the PDWRF not recycled for irrigation and industrial use is discharged to the Santee Lakes,	The suggested change will be made. See Errata Sheet Item 3.
Page 2, Finding 7: Our research indicates the **Lower** San Diego is a 12-mile urban waterway not 20-mile. This would change the majority of the paragraph. If the **Middle** S.D. river is included, 20-miles is representative.	Although the "Lower" San Diego River has no official definition, it is commonly referred to as the 20-mile stretch of the river downstream of Lakeside.
Page 2, Finding 8: SBWRF should be PDWRF	The suggested change will be made. See Errata Sheet Item 4.

Page 7, Section B, Discharge Specifications: Opening paragraph reads: "The discharge of treated wastewater **from the PDWRF to Sycamore Creek,** ……" The paragraph is followed by four important discharge limits and requirements that have been identified as limits that are specific to the discharge **from the PDWRF to the Santee Lakes.** We request the wording to reflect the point of discharge **from the PDWRF to the Santee Lakes.**	The suggested change will be made. However, notes will be added to the Order clarifying that compliance with the discharge specifications for turbidity is to be evaluated prior to the chlorination process and that compliance with the discharge specifications for nitrogen, phosphorous, toxicity, and chlorine residual is to be evaluated at the point of discharge from Lake No. 1 to Sycamore Creek. See Errata Sheet Items 5 – 9.
Page 7, Sections B.1 and B.2: Items 1 and 2 state that not less than a removal of 85% BOD and TSS reduction will be performed. We are requesting that these instructions be removed; we are required to meet a monthly average discharge of 15 mg/L for both constituents. Calculating percentage of removal is a time consuming task that does not provide meaningful information to either the operations or records of the treatment facility.	As stated in Section 6.A of the Fact Sheet, 40 CFR 133.102 establishes minimum secondary treatment standards for TSS and BOD, including requirements that the 30-day average percent removal of TSS and BOD not be less than 85 percent.
Page 15, Section E. Biosolid Requirements: Remove the entire section. We do not have any biosolids handling at this facility. The instructions do not apply to us. We have a contractual agreement with San Diego MWD to handle all of our biosolids.	It is acknowledged that all biosolids are sent to the City of San Diego for disposal. However, since the facility does handle biosolids, the referenced rules are applicable. An additional sentence will be added to Section E.6 clarifying that, as long as all biosolids are returned to the sanitary sewer and conveyed to the City of San Diego for disposal, there are no reporting requirements. See Errata Sheet Item 10.
Page 37, Section B.6: We would like clarification on these instructions. Duplicating samples for our quarterly and annual samples could cost as much as $4000.00/ year. An acceptable QA/QC method addresses this subject without duplication.	The second sentence will be changed to require duplicate chemical analyses on a minimum of ten percent of the samples or at least once during the permit term, whichever is greater. See Errata Sheet Item 11.
Page 40, Section B.32, third and forth sentences: Within the sentences it should read: or any ~~improved~~ approved method …	The term "improved method" is used to allow the discharger the opportunity to substitute alternative methods.

Page 45, Section D. Influent Monitoring: The table shows a list of items to monitor. A series of Nitrogen and Phosphorous tests are listed. These are costly tests and are meaningless to the evaluation and operation of the treatment facility. Currently, we test for and report Total Nitrogen and Total Phosphorous. Although the tests required to report Total Nitrogen and Total Phosphorous are similar to those listed in the series, we request that the report requirements stay as Total Nitrogen and Total Phosphorous. Adding organic nitrogen, nitrate, nitrite and orthophosphate phosphorous to the list of constituents, that must be reported, will not be useful in the operation or records of the treatment facility.	The suggested changes will be made. Requirements for influent nitrogen and phosphorous monitoring will be changed to total nitrogen and total phosphorous. See Errata Sheet Item 12.
Page 46, Section E.1, Station A Effluent Monitoring Continues recording is required for Specific Conductance, pH, and Turbidity. We are currently reporting these items to the RWQCB. The continuous sampling and monitoring is at the discharge from the Chlorine Contact Tank **before** dechlorination. We request that footnote #3 be added to these three items to identify that the treated effluent is being continually monitored **before** dechlorination.	Footnote 2 will be changed to specify measurement of turbidity prior to chlorination. Reference to footnote 3 will be made for specific conductance and pH allowing measurement prior to dechlorination. See Errata Sheet Item 13.
Page 46, Section E.1, Station A Effluent Monitoring: The series of Nitrogen and Phosphorous tests were added to this permit for the point leaving the treatment facility. Through discussion with the RWQCB, we have determined that the point of concern is located at the discharge from Lake #1 to Sycamore creek. We are testing for and required to meet very stringent TMDL limits at the point where the treated effluent is discharged to Sycamore creek. We request removing the requirement for reporting Nitrogen and Phosphorous at the point leaving the treatment facility.	Requirements for nitrogen and phosphorous monitoring at Station A will be changed to total nitrogen and total phosphorous. See Errata Sheet Item 14.

Page 47, Section E.1, Station A Effluent Monitoring, Footnote Number 2: The permit states: "Effluent turbidity analyses should be conducted using a continuous monitoring and recording turbidimeter. The discharger shall report monthly results of four-hour turbidity readings, average effluent (24-hours), 95 percentile effluent turbidity (24-hours), and the daily maximum (daily being defined as the 24-hour period from 12 am to 12 am). Continuous turbidity monitoring must also be provided prior to filtration to ensure adequate process control, and automatic coagulant feed when the turbidity of the secondary effluent is greater than 10 NTU." We request that requirements for turbidity monitoring and reporting stay the same as they are written on page 8, item #4. Turbidity concentrations of the effluent shall not exceed a daily average of 2 Nephelometric Turbidity Units (NTU), shall not exceed 5 NTU more than 5% of the time during a 24-hour period, and shall not exceed 10 NTU at any time.	Footnote number 2 will be changed as indicated in Errata Sheet Item 15. However, reporting of the 24-hour average, 95th percentile, and daily maximum turbidity is required in order to determine compliance with Title 22 requirements for the use of recycled water.
Page 49, Section F.1.d. Core Receiving Water Monitoring: Perform monthly sampling only during those months that we are discharging water to Sycamore Creek. Otherwise perform sampling on a quarterly basis. Footnote #3. States that the dissolved oxygen measurements shall be taken no later than 8:00 am and that we are responsible for reporting the % saturation (calculated based on temperature). We request that the requirement for measurement of dissolved oxygen be changed to the earliest time possible. Our records show that the last sample is usually taken by 9:30 am. We would also ask that the reporting of temperature and dissolved oxygen, would meet the necessary requirements of the District, eliminating the time consuming task of calculating the % saturation at each point. The receiving water monitoring plan implementation requires several field tests and the collection of samples in various containers, depending on the test to be done and the preservative to be used, and travel time between the sites. Meeting the 8:00 deadline would require either using multiple sampling teams, scheduling sampling on different days, beginning earlier in the day, or visiting each sample point twice, Once for D.O. and once to take the remainder samples and tests. Each of these alternatives is more costly than the method of visiting each sample only once in a sequential manner.	The year-round monthly monitoring schedule is intended to capture effects of the discharge that are not limited to the months during which the discharge occurs. Footnote number 3 will be changed to state that the dissolved oxygen measurements shall be taken at the earliest time possible. However, the requirement to report the % saturation will be maintained. See Errata Sheet Item 16.

Page 50, Section F.2. Regional Watershed Monitoring: We request that the instructions in the first sentence be removed from our permit requirements. Our obligations should be limited to the direction set forth in the permit instructions and MRP.	As stated in the subject paragraph, the intent of a regional watershed monitoring program is to maximize the efforts of all monitoring partners in the watershed using a more cost-effective monitoring design and to best utilize the pooled resources of the region. It is anticipated that, during such an event, the discharger will only be asked to commit resources that would otherwise be used for core receiving water monitoring. However, as with any monitoring and reporting program, the Regional Board may decide at any time that additional monitoring is needed to address specific water quality issues, including participation in regional monitoring.
August 25 comments regarding Financial impact due to the new MRP: We appreciate the effort that has gone into preparing this new permit. We have carefully researched the abilities of the District to meet the requirements within the new permit. We understand that an effort was made to reduce the monitoring frequency of many items that are currently required of us. These cost reductions were considered in the final calculated increases. The following tests are added to the new MRP. • E-Coli at stations 1-2,4-7 each month at approximately $2200/year • Chlorophyll-a at stations 1-2,4-7 each month at approximately $5400/year • Fish tissue test at Mission Ponds at approximately $2500/year • Sediment phosphorous series at stations 1-2,4-7 each month at approximately $7200/year • Periphyton analysis at stations 1,6 each quarter at approximately $8000/year • Benthic macroinvertebrate analysis at stations 1,6 each quarter at approximately $17,600/year We have concluded that there will be an added cost of at least $40,000 per year to address all of the additional monitoring and testing requirements in this MRP. The costs associated with these tests will be added to the existing budget of approximately $85,000/year for river monitoring. This new MRP will force an increased cost of 47% to the existing monitoring budget. **August 26 comments regarding Financial impact due to the new MRP:** Thank You for responding to my E-Mail so quickly. The following calculations reflect the approximate cost savings associated with the adjustments proposed in the new MRP. Metals reduced from Quarterly to Annually. $3825 Influent TN and NH3 Reduced from Bi-weekly to Monthly. $ 300 All Biweekly to Monthly tests $5408 Total $9533	During development of the tentative receiving water monitoring and reporting program (MRP), consideration was given to both technical and financial concerns. An objective of the Regional Board was to redesign the MRP without significantly increasing the cost of the program to the PDMWD. In keeping with that objective, the following changes will be made to the MRP: 1. Chlorophyll-a sampling frequency will be reduced from monthly to quarterly 2. Sediment phosphorous sampling frequency will be reduced from monthly to quarterly 3. Benthic macroinvertebrate and periphyton bioassessment frequency will be reduced from quarterly to semiannually. These changes will result in an estimated $21,200 reduction in the annual cost of the MRP. PDMWD estimates that organic nitrogen sampling will result in an additional cost of $3,360 per year. However, organic nitrogen is calculated by subtracting ammonia nitrogen from total kjeldahl nitrogen, and requires no additional laboratory analyses than contained in the existing MRP. PDMWD acknowledges an estimated $5,400 in savings associated with reduced toxicity testing requirements in the first year of the new MRP compared to the current MRP.

<table>
<tr>
<td>There is a possible cost savings of $5400 for the reduced Toxicity tests in the forth quarter. This savings is contingent upon favorable results of the quarterly tests performed during the year.

The added costs to the District are:

Organic Nitrogen, Monthly at stations 1-2,4-7 and lake #1 $3360
Nitrites, Monthly at stations 1-2,4-7 and lake #1 $1260
E-Coli Testing, Monthly at stations 1-2,4-7 $2200
Chlorophyll-a, Monthly at stations 1-2,4-7 $5400
Sediment Phosphorous, Monthly at stations 1-2,4-7 $7200
Fish Tissue at Mission Ponds $2500
Periphyton, Quarterly at stations 1,6 $8000
Benthic macroinvertebrates, Quarterly at stations 1,6 $17,600
Total $47,520

The cost increase is $37,987 to the district. With favorable results from the toxicity tests the cost increase would be $32,587.

These adjustments net an increase of 38 - 45% to the budgetted $85,000 for river monitoring. These calculations are slighlty different than the original estimations. Notably the cost savings for the reduced toxicity test and the added costs for the nitrogen series tests were originally overlooked.</td>
<td>However, the comments do not reflect that, in the second through fifth year of the permit, the savings associated with the reduced toxicity testing requirements should be approximately $16,000 per year (assuming no toxicity violations requiring accelerated testing).

After the changes in the required testing frequency for chlorophyll-a, sediment phosphorous, benthic macroinvertebrates, and periphyton discussed above, the cost of the first year of the new core receiving water program should be approximately $8,000 more than the current program. However, in the second through fifth year of the permit, the cost of the new program will be approximately $3,000 less than the current program.

See Errata Sheet Item 17.</td>
</tr>
<tr>
<td>We would appreciate the opportunity to make final comments to the Permit and MRP prior to the end of the review period.</td>
<td>PDMWD’s written comments are welcome at any time prior to the end of the written comment period, which ended on September 3, 2003. Oral comments may be presented at the September 10, 2003 Regional Board meeting.</td>
</tr>
</table>